In the Claims:

1. (Currently Amended) A reusable maximum/minimum thermometer comprising an expansion liquid (42) which expands or contracts in response to changes in temperature, a transfer liquid (48) which is moved in response to the expansion or contraction of the expansion liquid and which is substantially immiscible with the expansion liquid, two indexes (44, 51), and a temperature scale associated with the maximum/minimum thermometer, wherein the indexes are moved by the transfer liquid into resting positions where maximum and minimum temperatures are read off the temperature scale, and wherein the transfer liquid is a mercury free solution selected from the group consisting of inorganic compounds, organometallic compounds, organic liquids, and ionic liquids.

2. (Original) The maximum/minimum thermometer according to claim 1 wherein the transfer liquid has a density which is different from that of the expansion liquid.

3. (Original) The maximum/minimum thermometer according to claim 2 wherein the transfer liquid has a density greater than that of the expansion liquid.

4. (Original) The maximum/minimum thermometer according to claim 3 wherein the transfer liquid has a density greater than 0.87 g. cm^{-3}.

5. (Previously Presented) The maximum/minimum thermometer according to claim 1 wherein the transfer liquid remains substantially liquid at least between -30°C and +50°C.

6. (Previously Presented) The maximum/minimum thermometer according to claim 1 wherein the transfer liquid further displays a low thermal expansivity; a low toxicity; and/or is coloured or capable of being coloured.

7. (Original) The maximum/minimum thermometer according to claim 6 wherein the

transfer liquid is capable of being coloured by a suitable dye.

8. (Previously Presented) The maximum/minimum thermometer according to claim 7 wherein the dye is selected from Aniline Blue, Eurocert Green S or water soluble salts of inorganic complex ions such as the tetra-ammino copper (II) ion or the hexacyanatoferrate ion.

9. (Cancelled)

10. (Previously Presented) The maximum/minimum thermometer according to claim 1 wherein the transfer liquid is a solution comprising inorganic or organometallic compounds of elements found in groups III, IV, V, VI and VII of the periodic table, or mixtures thereof.

11. (Original) The maximum/minimum thermometer according to claim 10 wherein the compounds are halogen containing compounds.

12. (Previously Presented) The maximum/minimum thermometer according to claim 1 wherein the transfer liquid is a solution comprising ionic compounds.

13. (Original) The maximum/minimum thermometer according to claim 12 wherein the transfer liquid is a solution comprising at least one alkaline earth and/or alkali metal salt.

14. (Original) The maximum/minimum thermometer according to claim 13 wherein the solution is an aqueous solution in which said at least one alkaline earth and/or alkali metal salt is dissolved.

15. (Original) The maximum/minimum thermometer according to claim 14 wherein the aqueous solution comprises an amount of alkaline earth and/or alkali metal salt from between 80% and 400% w/v.

16. (Original) The maximum/minimum thermometer according to claim 15 wherein the alkaline earth or alkali metal salt is selected from halides, sulphates, hydroxides, carbonates, chlorates, dichromates, chromates, carboxylates, nitrates, nitrites, phosphates, ammonium compounds or other salts comprising an alkaline earth or alkali metal ion and a cationic species.

17. (Original) The maximum/minimum thermometer according to claim 16 wherein the alkali earth or alkali metal salt is selected from CaI_2, $CaBr_2$, CsBr, CsF, CsOH, Cs_2SO_4, CH_3COOC_s, $KF.2H_2O$, HCOOK, KI, KNO_2, RbF, $NaClO_4.H_2O$, $Na_2Cr_2O_7.2H_2O$ and $NaI.2H_2O$.

18. (Previously Presented) The maximum/minimum thermometer according to claim 1 wherein the expansion liquid comprises a hydrocarbon or mixtures of hydrocarbon.

19. (Previously Presented) The maximum/minimum thermometer according to claim 1 wherein the indexes have a density less than that of the transfer liquid and are able to float at the surface of the transfer liquid.

20. (Original) The maximum/minimum thermometer according to claim 19 wherein the indexes are in the form of a tube into which has been inserted a piece of ferrous wire.

21. (Previously Presented) The maximum/minimum thermometer according to claim 19 wherein the indexes are constructed from a plastic material into which has been mixed and/or melted a quantity of magnetic powder such as iron filings, magnetite (Fe_3O4), and/or strontium ferrite.

22. (Cancelled)